

FIG. 1

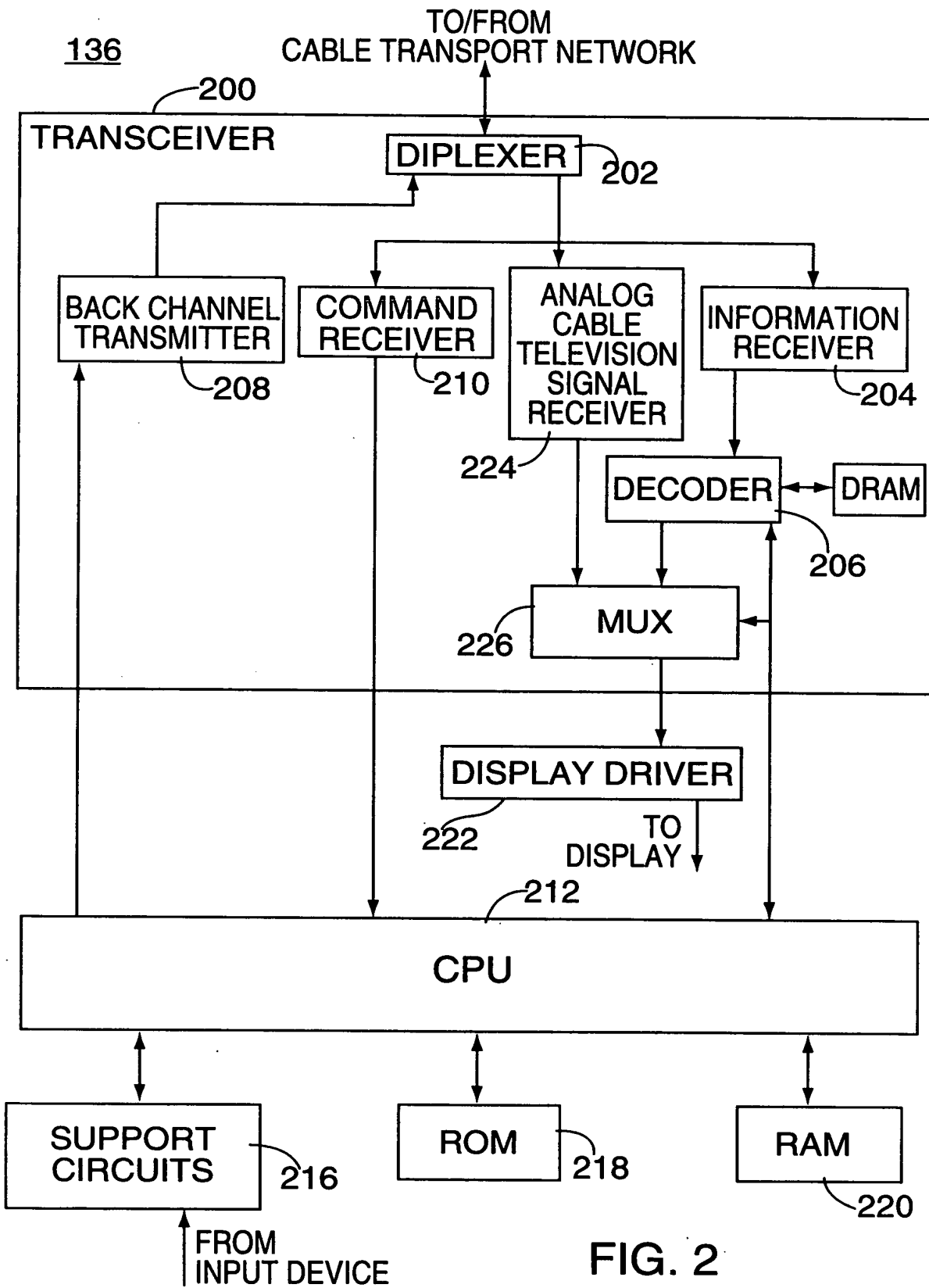


FIG. 2

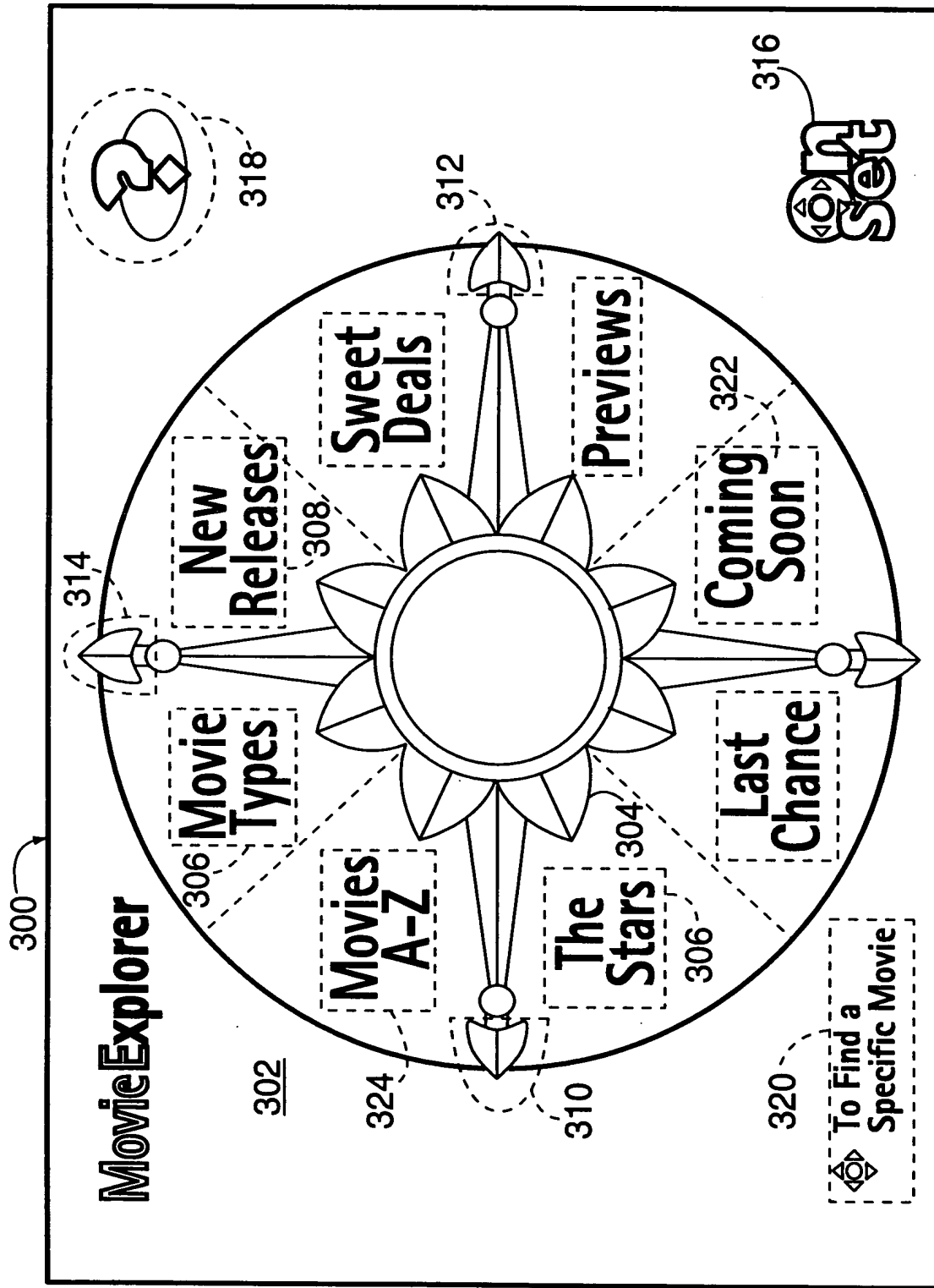


FIG. 3

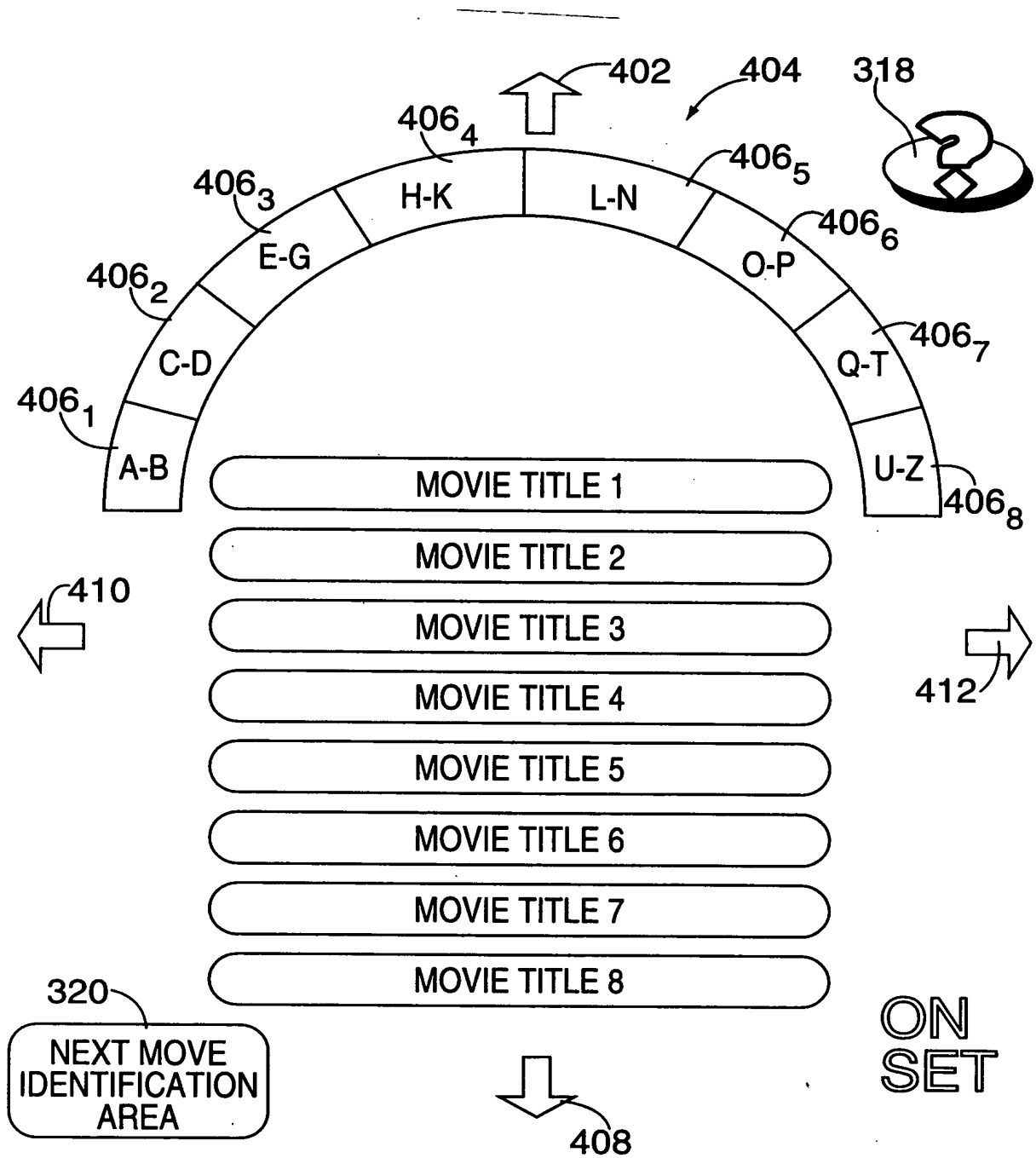


FIG. 4

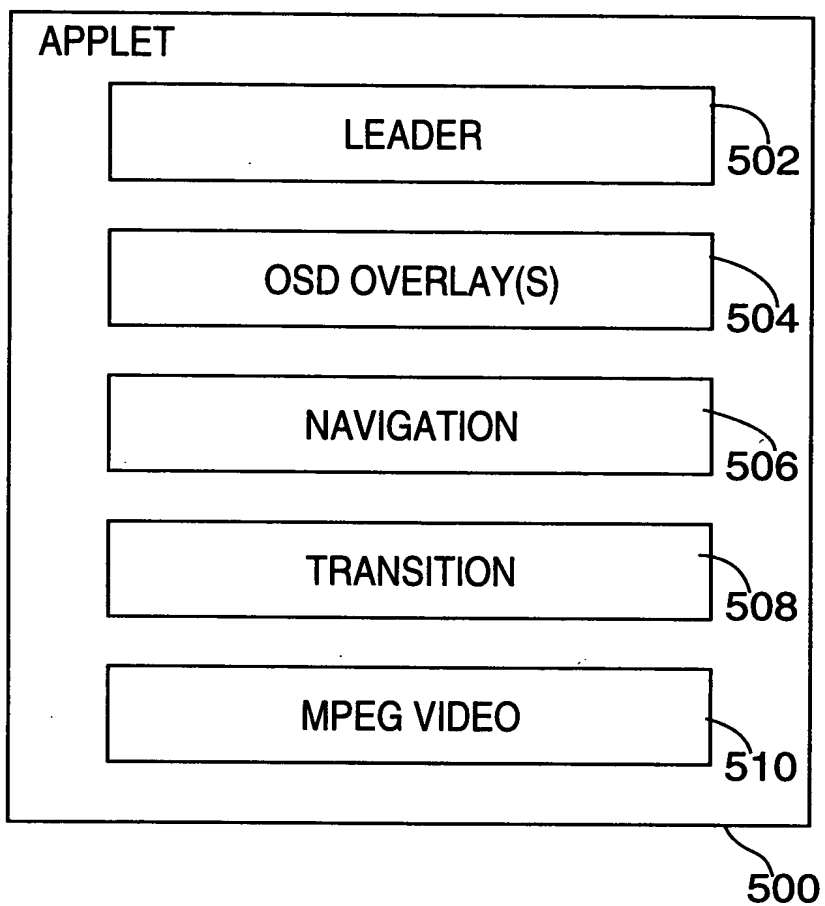
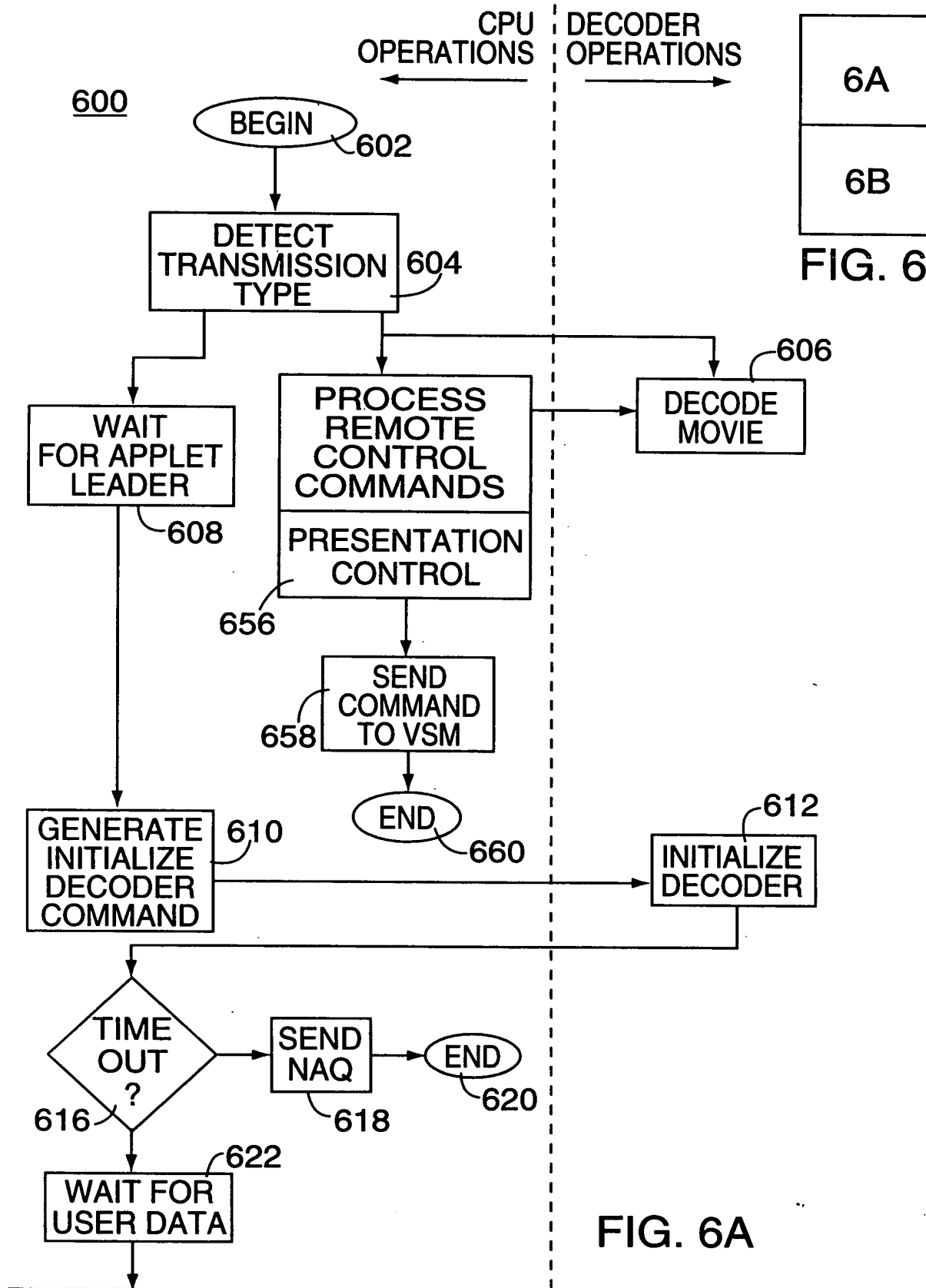
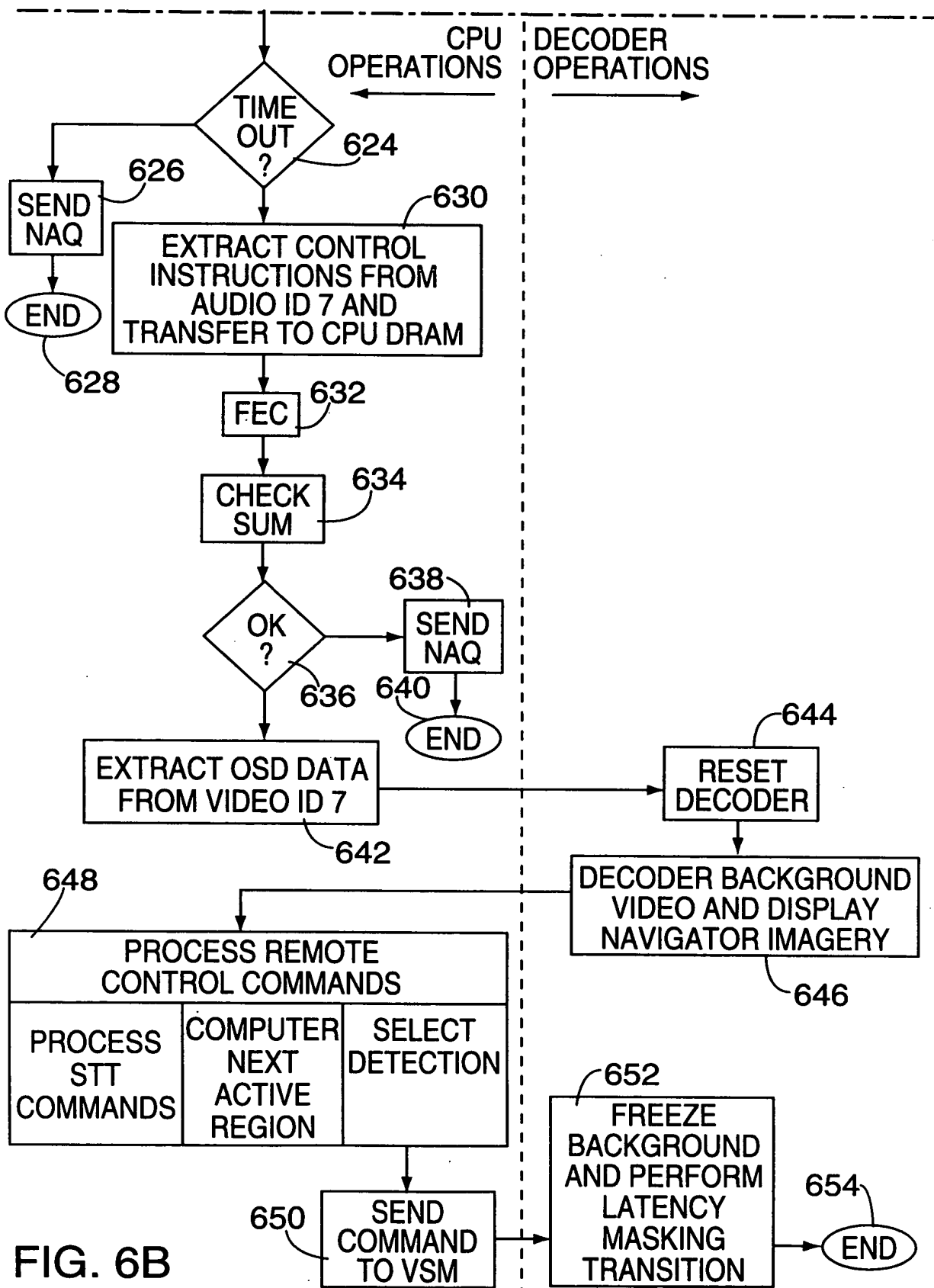


FIG. 5

CPU : DECODER
OPERATIONS : OPERATIONS





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graph TD
    702([BEGIN]) --> 704[RECEIVE LIST MENU]
    704 --> 706[DISPLAY PAGE 0]
    706 --> 708{PAGE 0 AVAILABLE ?}
    708 --> 710[REQUEST AND RECEIVE PAGE 0]
    710 --> 711[DISPLAY PAGE 0]
    708 --> 712[PROCESS NEXT REMOTE CONTROL COMMAND]
    711 --> 712
    712 --> 714{LAST PAGE ?}
    712 --> 720{PAGE 0 ?}
    714 --> 712
    720 --> 712
    712 --> 722[OTHER REGION SELECTION]
    722 --> 724[PROCESS REGION SELECTION]
    724 --> 726([END])
    714 --> 716{PAGE AVAILABLE ?}
    716 --> 718[REQUEST NEXT PAGE]
    716 --> 721[DISPLAY NEXT PAGE]
    718 --> 721
    721 --> 712

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FIG. 7

FIG. 7


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graph TD; VSM[FROM VSM] --> AID[APPLET ID]; ST[FROM SET TOP TERMINAL] --> RID[REGION ID]; AID --- RID; AID_RID[APPLET ID / REGION ID] --> AIT[APPLET ID TABLE]; AIT -- APPLET ADDRESS --> AM[APPLET MEMORY]; AM --> APP[APPLET];
```

The flowchart illustrates the process of applet memory allocation. It begins with two input sources: 'FROM VSM' and 'FROM SET TOP TERMINAL'. These inputs feed into a structure containing 'APPLET ID' and 'REGION ID'. A bracket indicates these two fields are treated as a single unit. This unit then points to the 'APPLET ID TABLE'. From the table, an 'APPLET ADDRESS' is output to 'APPLET MEMORY'. Finally, the 'APPLET MEMORY' block outputs the 'APPLET'.

FIG. 8

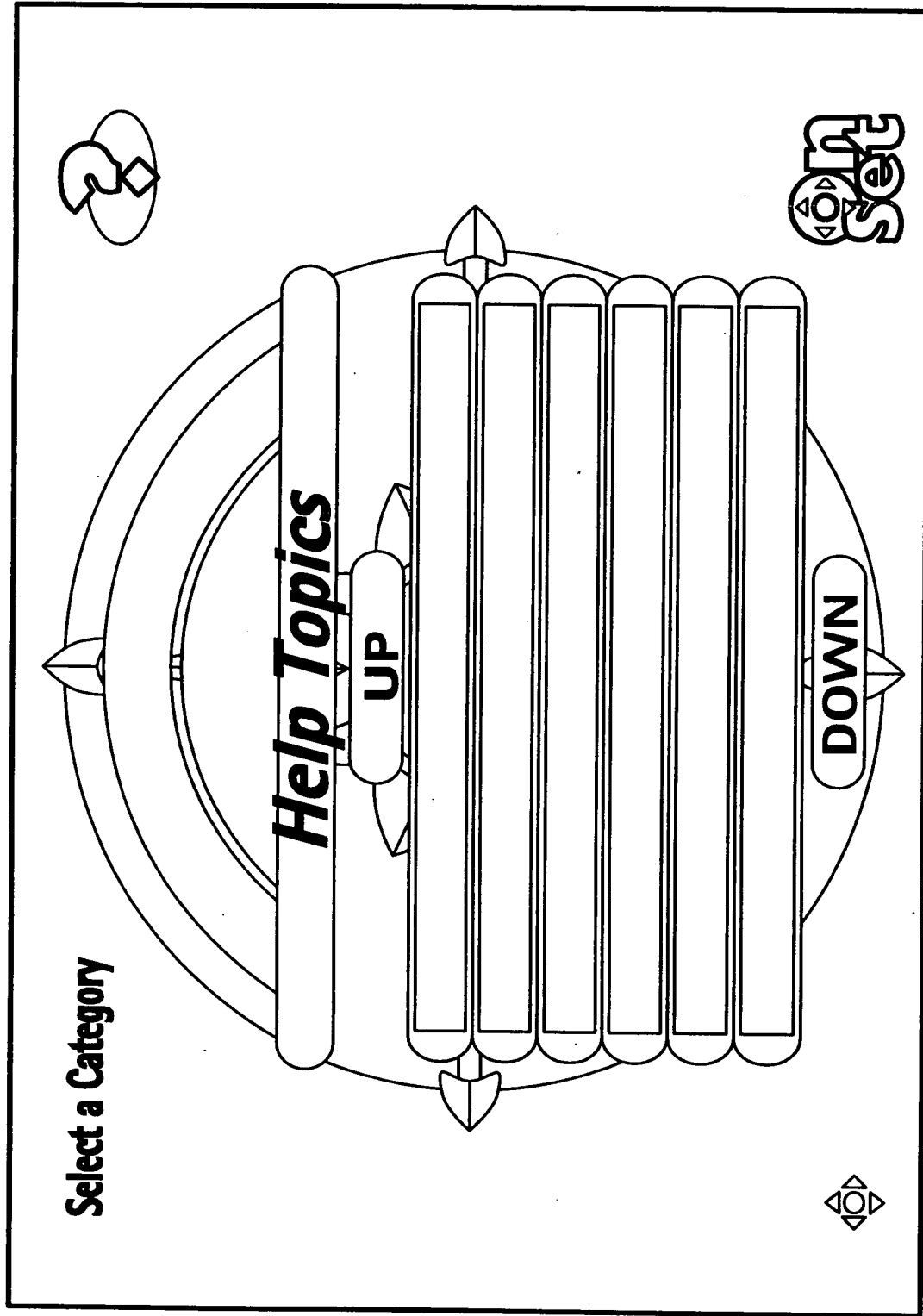


FIG. 9

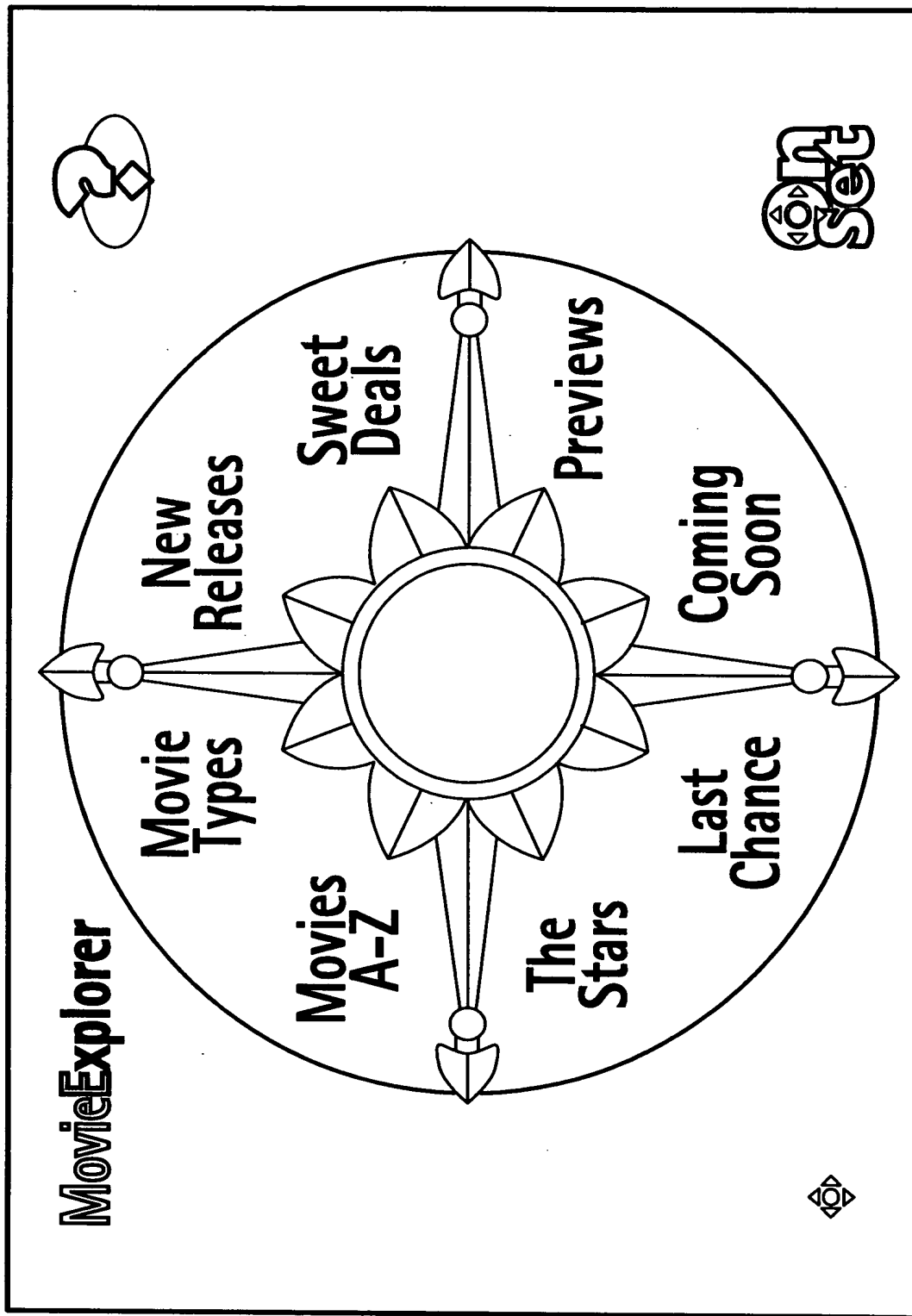


FIG. 10

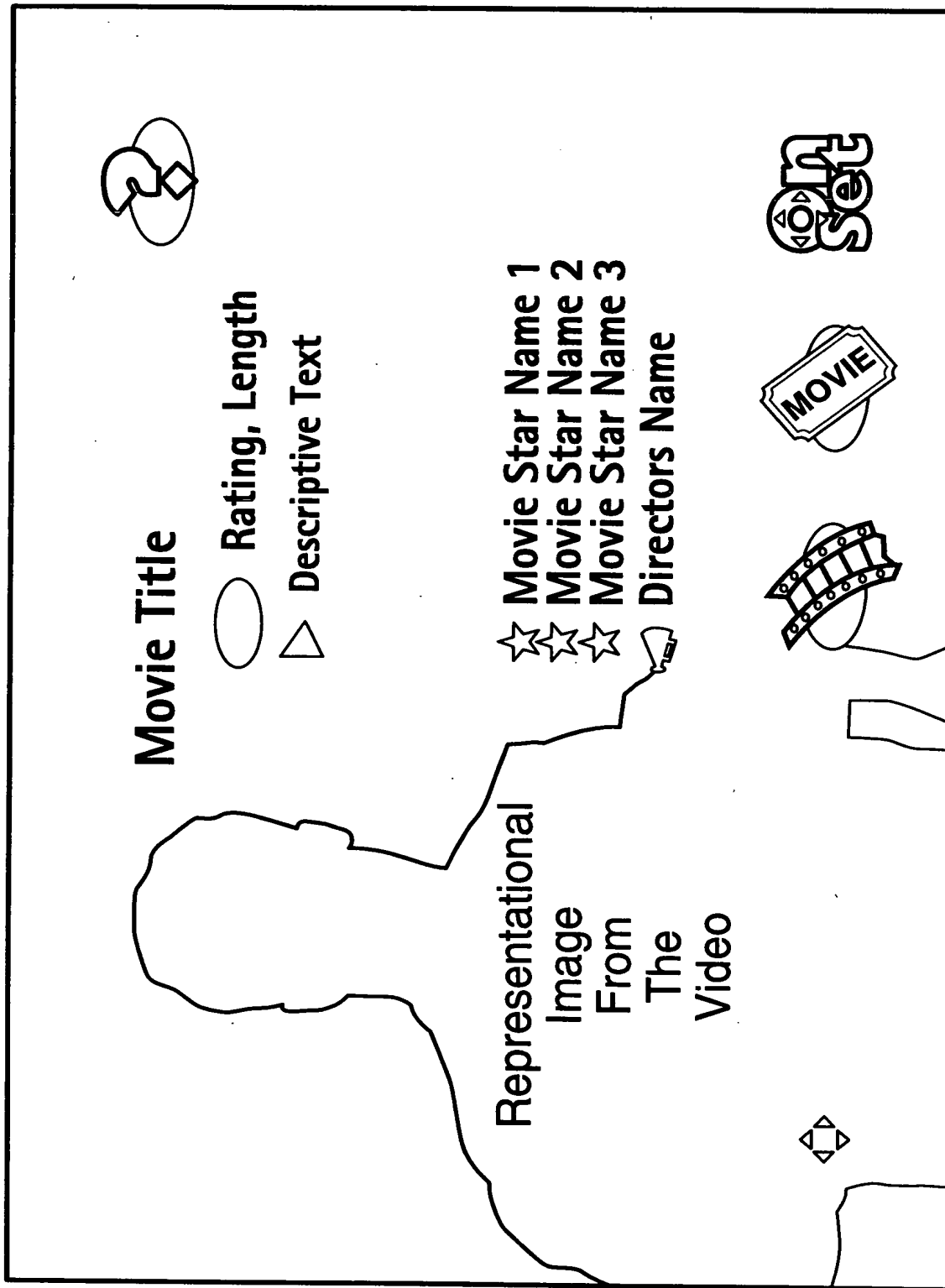


FIG. 11

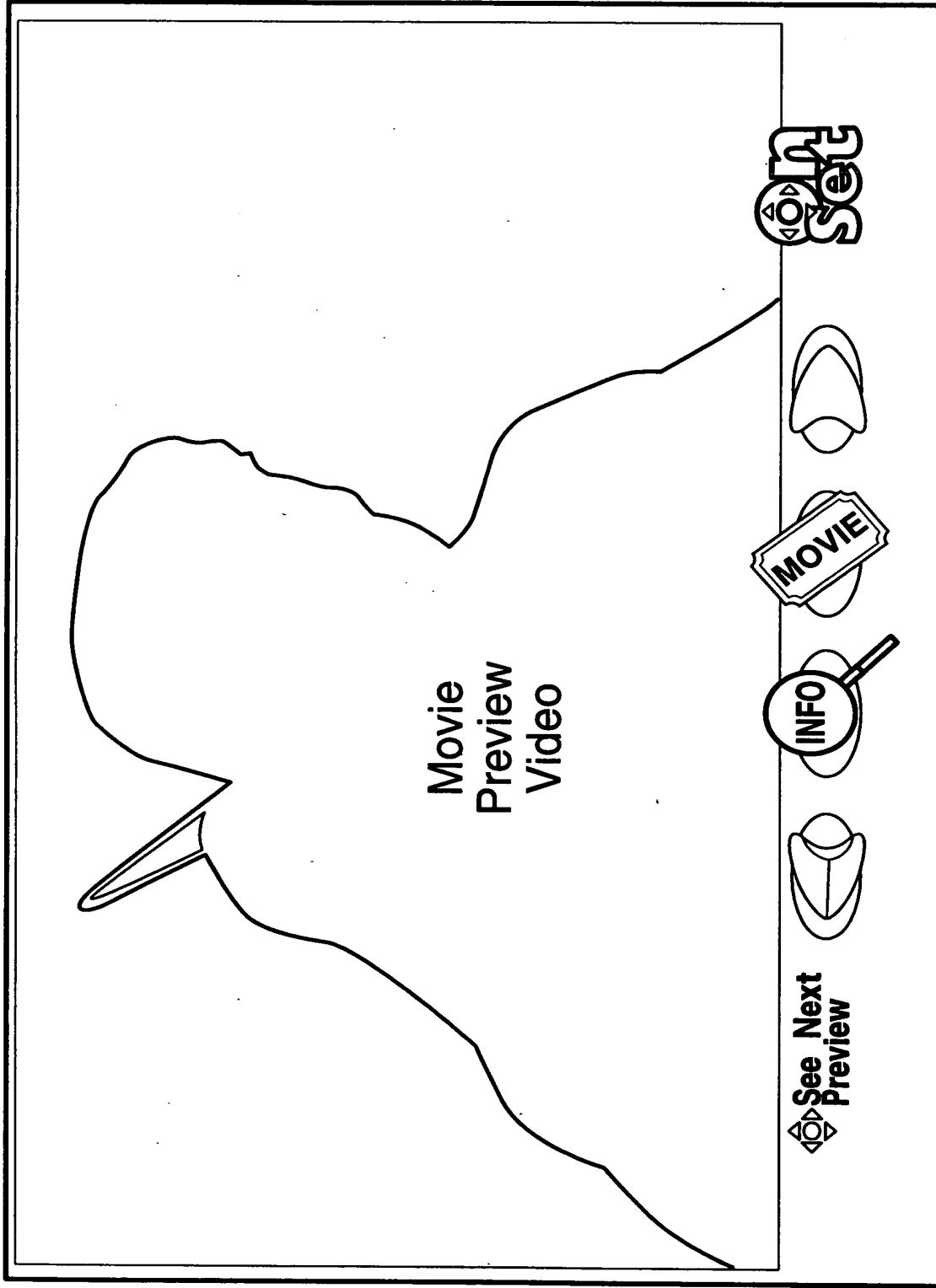
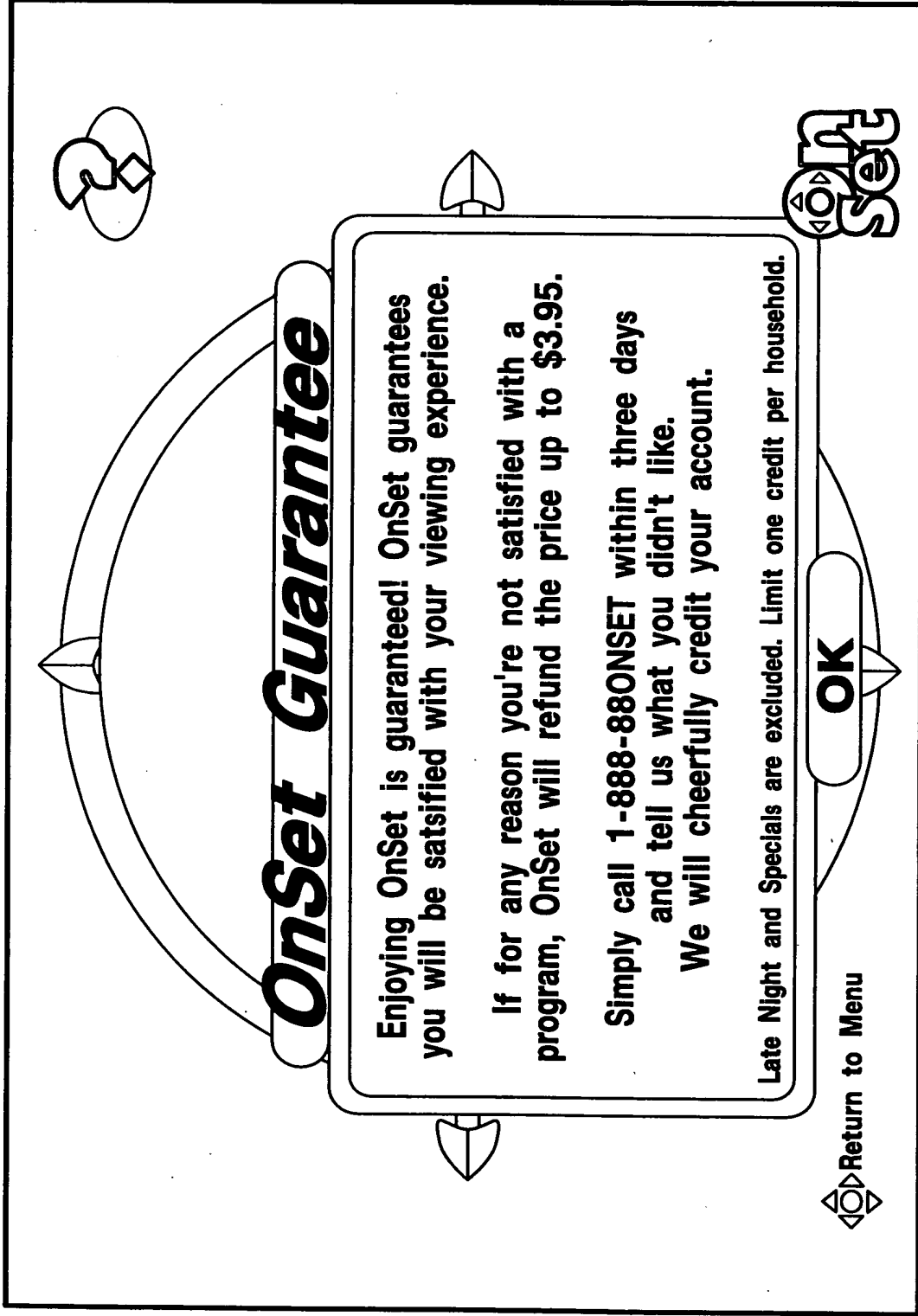



FIG. 11



VO: Text of Guarantee except for caveats

FIG. 13



VO: It's easy to set ratings and spending limits. Highlight a limit and move the OnSet Button left or right to change it. To set or reset the PIN Number, just enter four digits from the remote control. Select "Save" when you're done, or press "Return" to

OnSet Set Up

1 . Rating Limit:

Left or Right

◀

NONE

▶

2. Spending Limit:

◀

\$100

▶

3. PIN Number:

Enter Numbers

1

1


1

1

◀▶

No Restrictions

SAVE




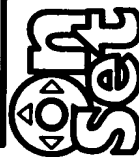
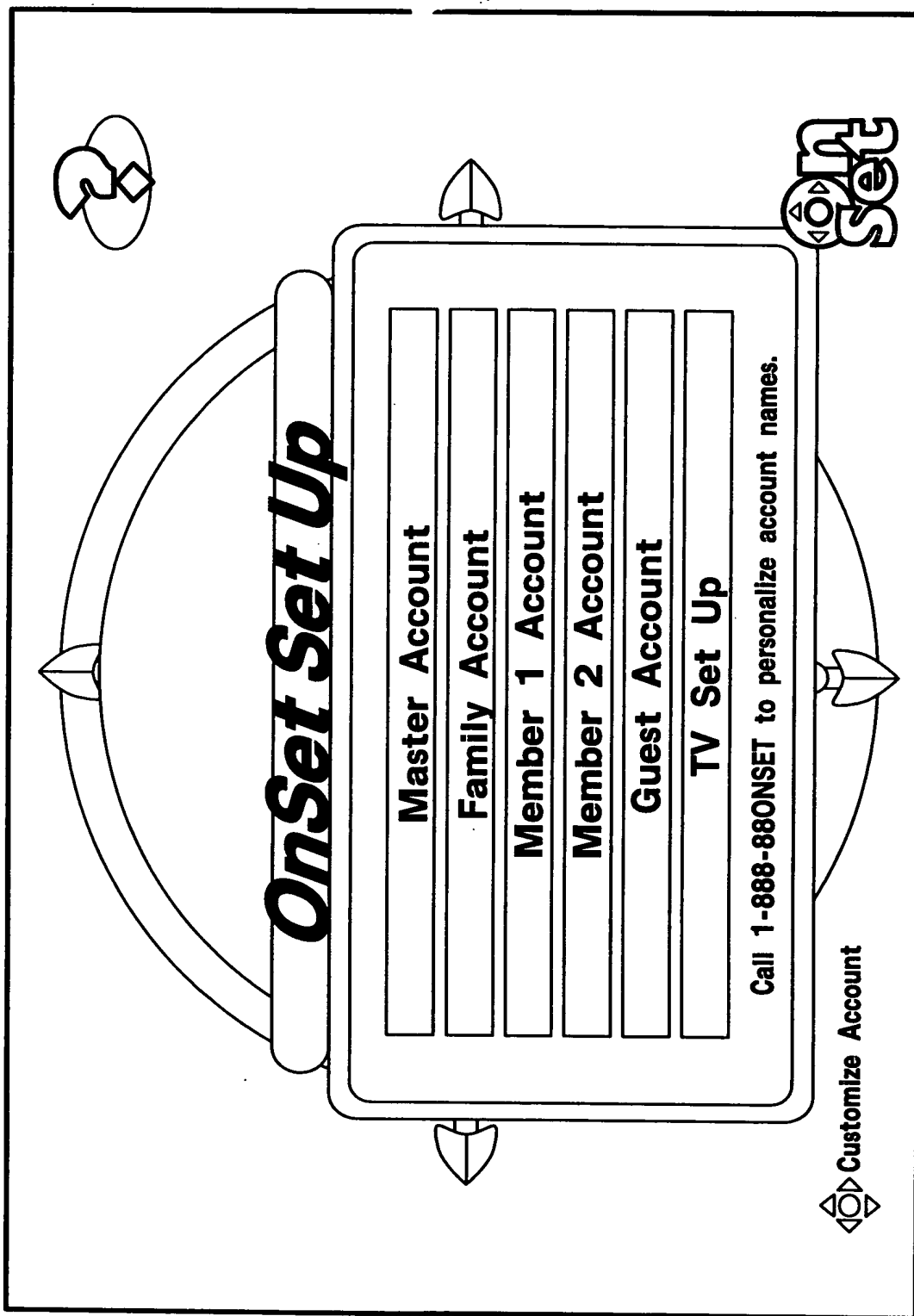
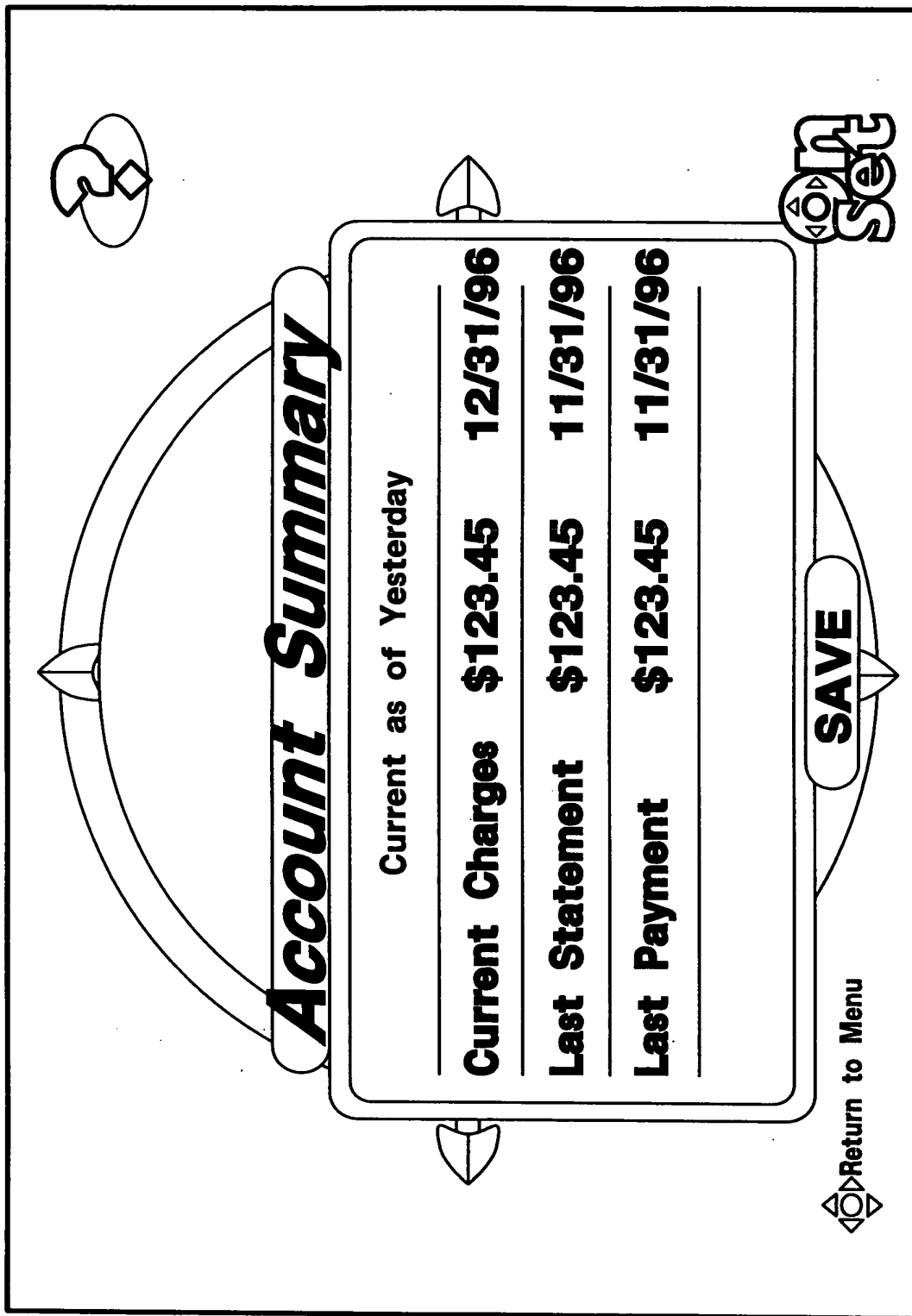


FIG. 14



VO: You can set up accounts to control spending and ratings limits for the members of your family. You can also set up this TV to require PIN numbers to use OnSet.

FIG. 15



Account Summary

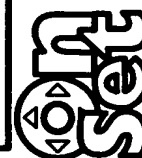
Current as of Yesterday

Current Charges	\$123.45	12/31/96
Last Statement	\$123.45	11/31/96
Last Payment	\$123.45	11/31/96

Return to Menu

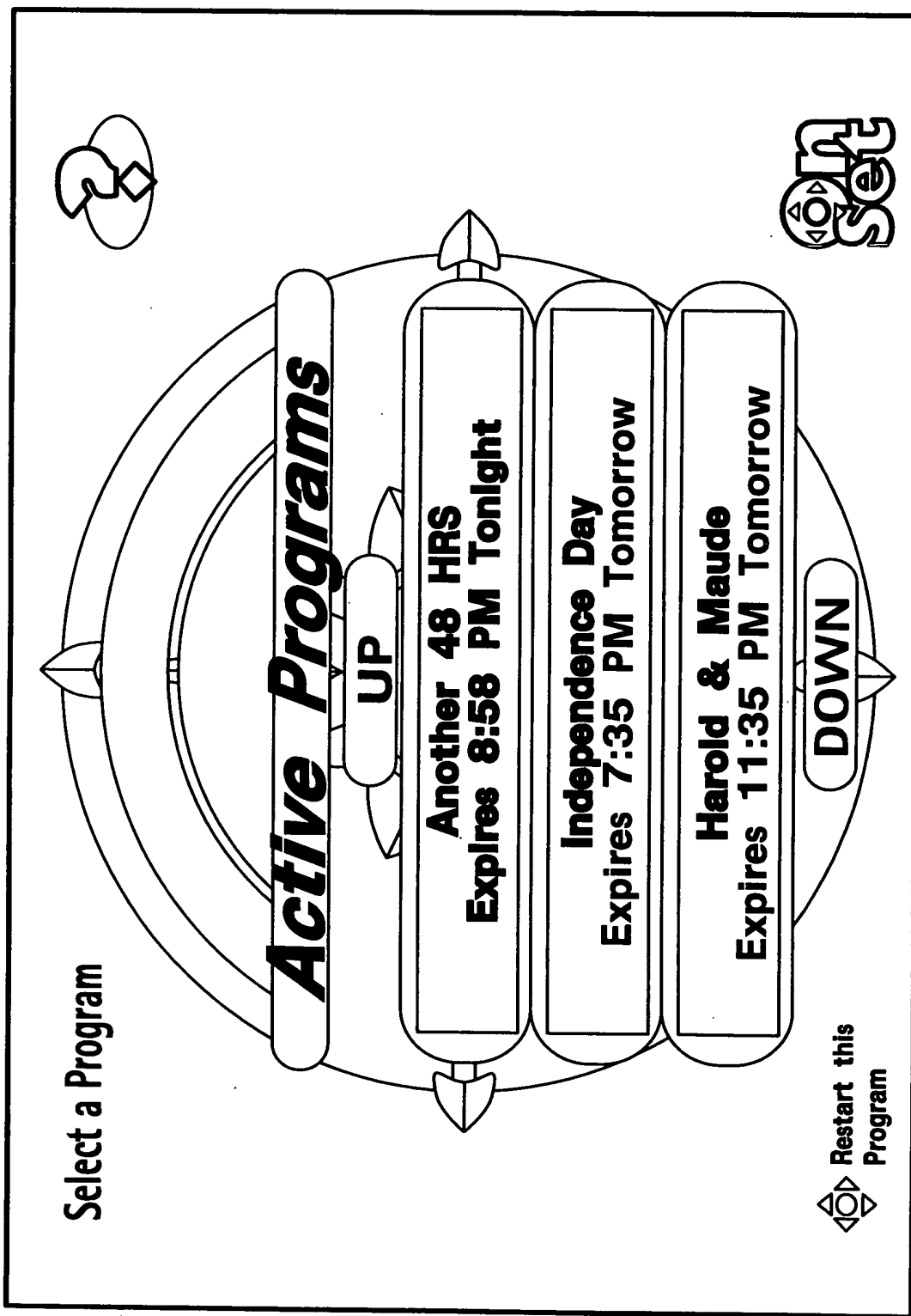
SAVE

OnSet



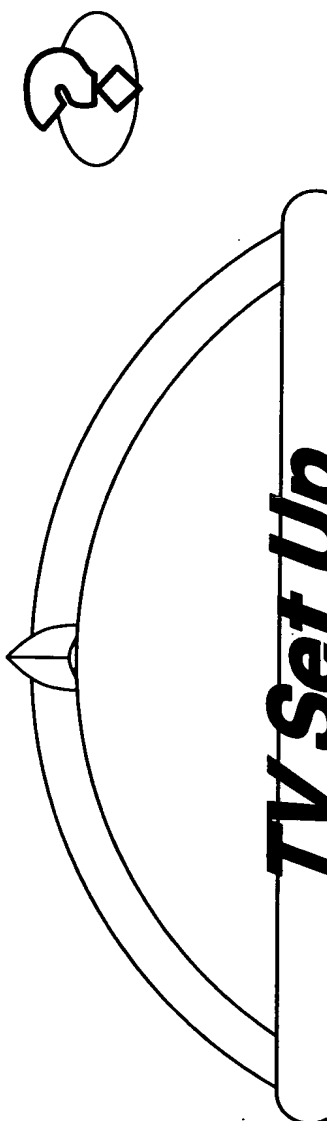
VO: Here is an up-to-date summary of your OnSet Account as of yesterday, including payments received and programs ordered. If you have additional questions, please call us at 1-888-88ONSET.

FIG. 16



VO: This screen lets you decide whether to require a PIN Number to use OnSet on this TV.
Move Left or Right to change settings. When you're ready, select "Save".

FIG. 17



TV Set Up


1. Require PIN Number to use OnSet on this TV?

Left or Right


◀ **NO** ▶


2. If No, which account's ratings and spending limits apply to this TV?

◀ **LONG-NAMED FAMILY'S ACCOUNT** ▶



VO: This screen lets you decide whether to require a PIN Number to use OnSet on this TV. Move Left or Right to change settings. When you're ready, select "Save".

 No Restrictions



SAVE

FIG. 18

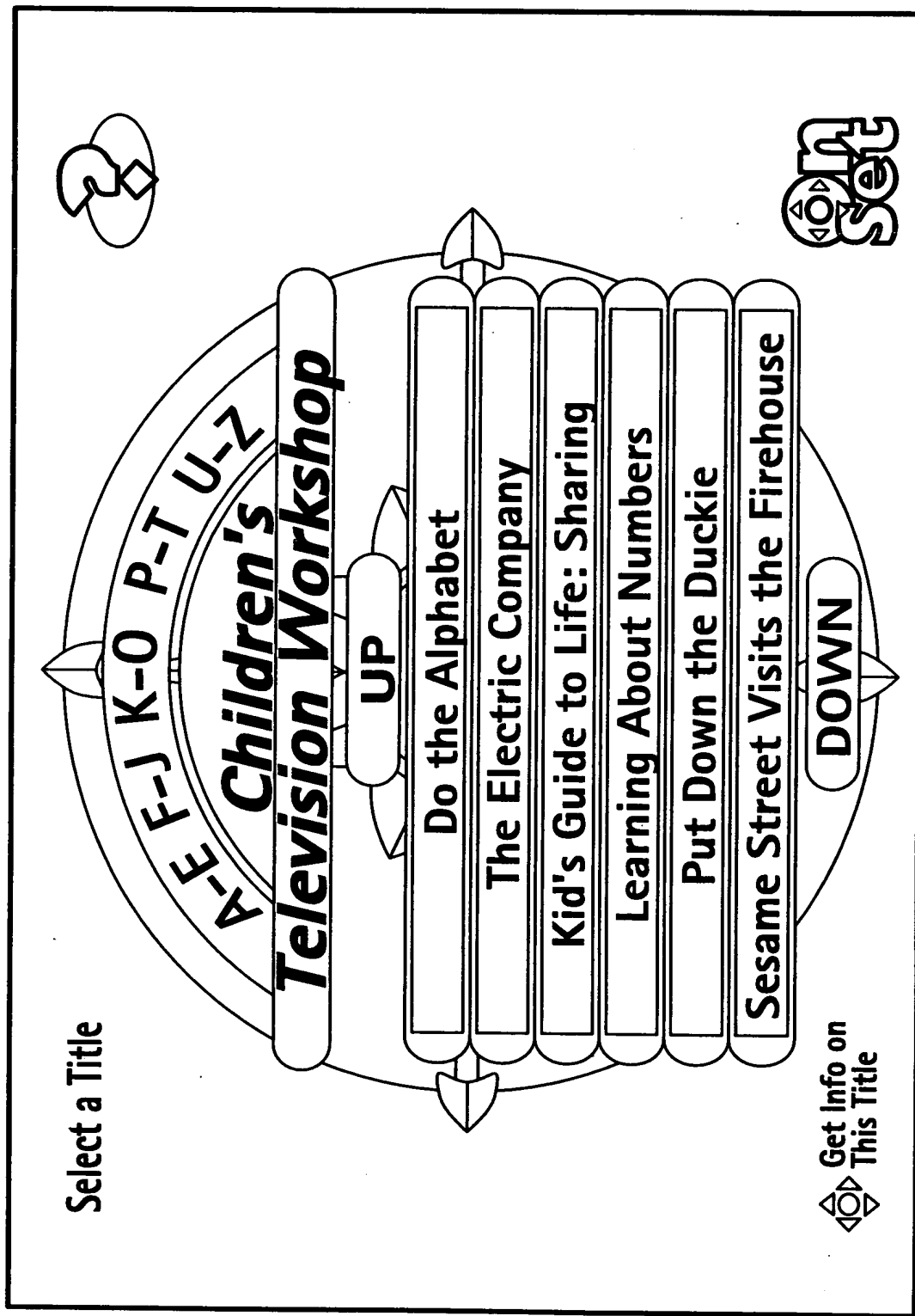
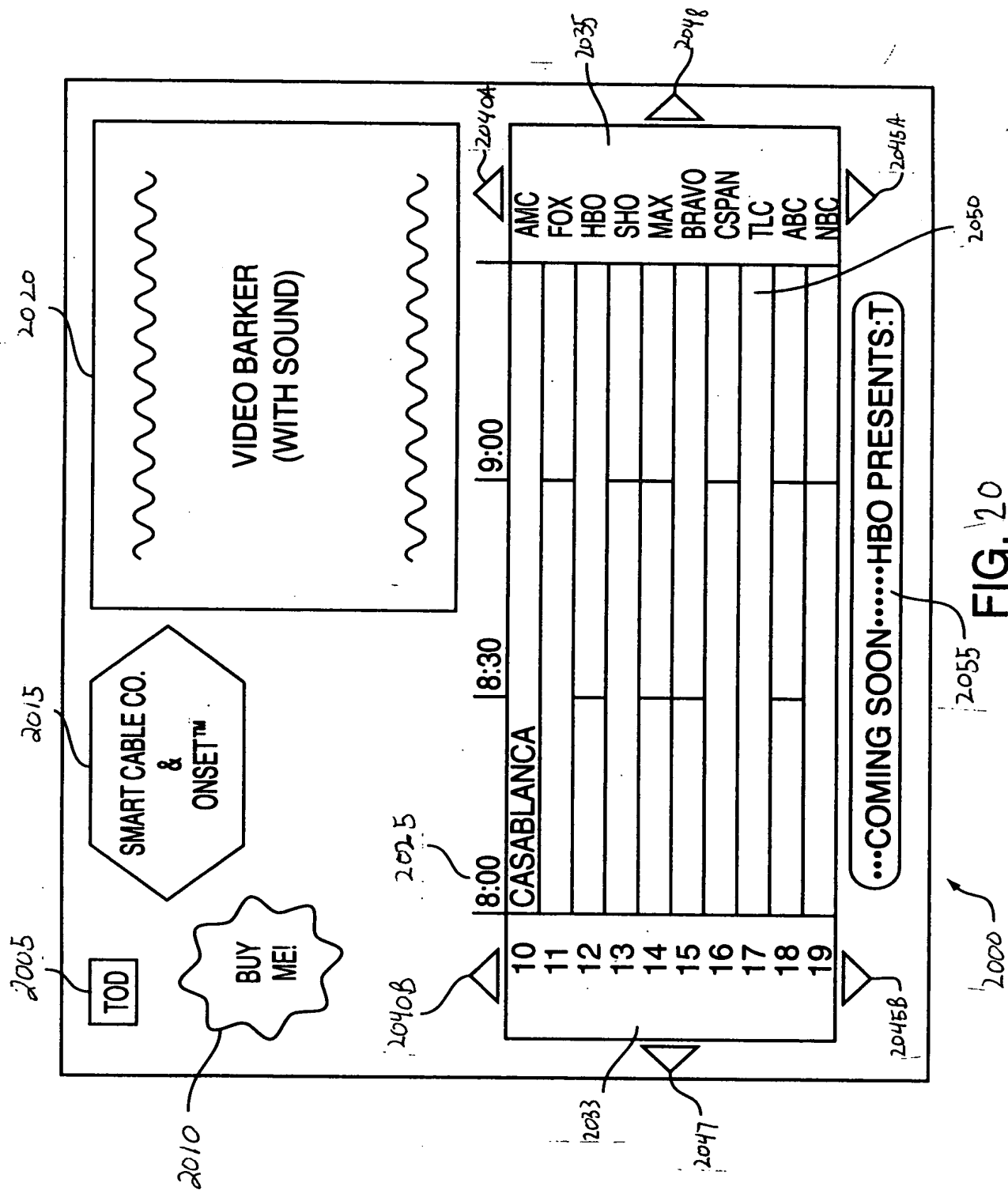


FIG. 19



002220-2956560

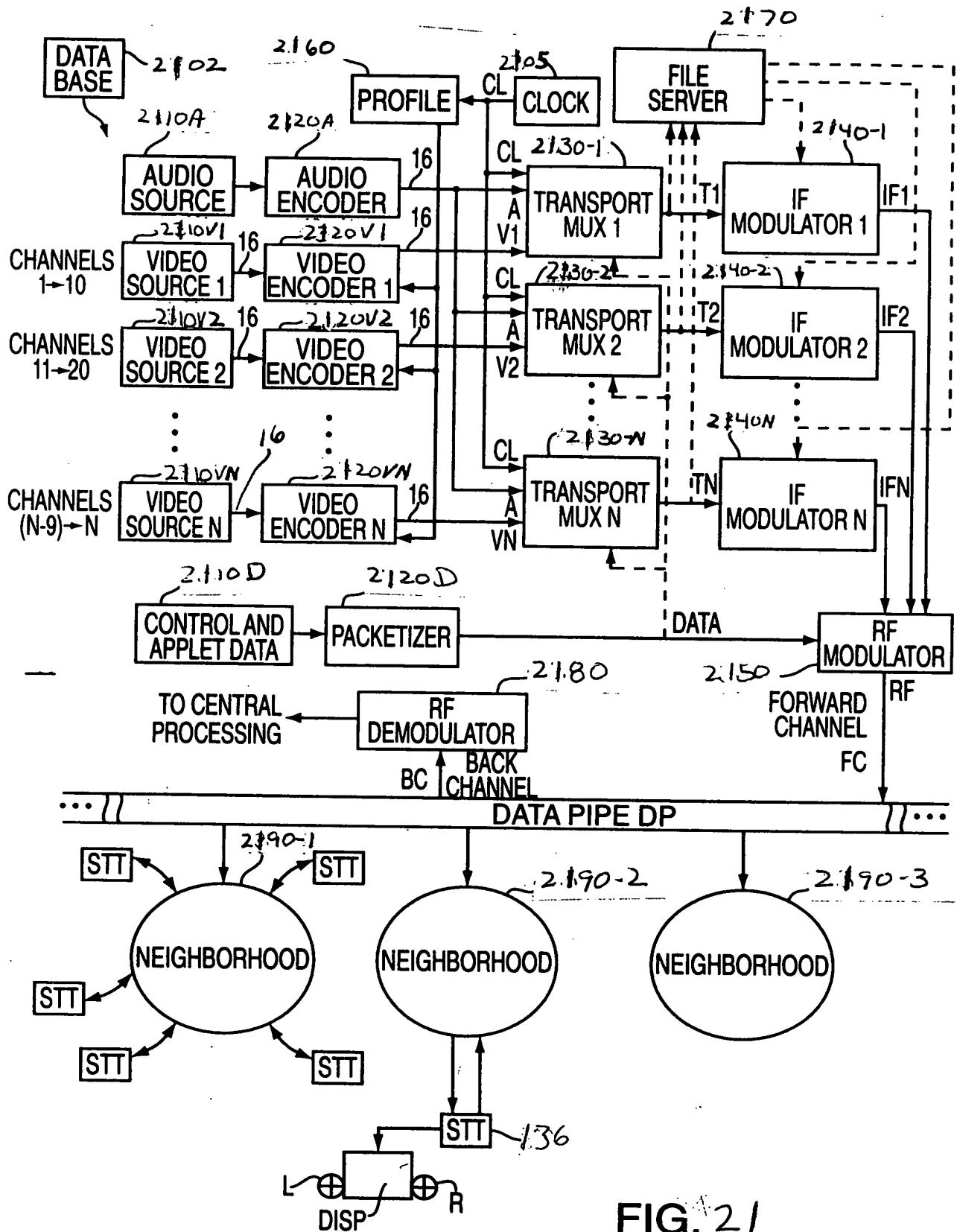


FIG. 21

The diagram illustrates a video game system 136. It features a **FROM FORWARD CHANNEL** input leading to a **TUNER** (2210), which outputs an **IF** signal to a **DEMODULATOR** (2220). The demodulator outputs a **TD** signal to a **TRANSPORT DEMUX** (2230). The transport demux has multiple outputs: **AE** to an **AUDIO DECODER** (2240), **VE** to a **VIDEO DECODER** (2250), and **DATA** (2260) to an **OSD** (On-Screen Display) block (2260). The audio decoder outputs **AD** to a **TO AUDIO PROCESSOR**. The video decoder outputs **VD** to a **COMPOSITOR** (2290). The OSD outputs **VOSD** to the compositor. The compositor outputs **F** to a **FRAME STORE** (2262), which then outputs to a **TO VIDEO PROCESSOR**. A **MODULATOR** (2275) receives a **TUNE** signal from the tuner and outputs **TO BACK CHANNEL**. A **CONTROLLER** (2270) is connected to the system via an **I/R** (Infrared) receiver (2275) and includes a **P** (Processor) (2272), **SUPPORT CIRCUITS** (2278), and **MEMORY** (2276). The memory is divided into **USER INTERACTION ROUTINE** (2300), **DYNAMIC OVERLAY STORAGE** (2276-2), and **STATIC OVERLAY STORAGE** (2276-1). A joystick (2280) with an 8-position joystick, number pad, select key, freeze key, and return key is also shown.

136

```

graph TD
    2302([START]) --> 2304[TUNE FIRST BROADCAST STREAM]
    2304 --> 2306[DEMUX AND DISPLAY VIDEO PID  
DEMUX AND PRESENT AUDIO PID]
    2306 --> 2308[RETRIEVE OVERLAY  
DISPLAY OVERLAY]
    2308 --> 2310[WAIT FOR USER INPUT]
    2310 --> 2312[EVALUATE INPUT]
    2312 --> 2314{ABSTRACTION LEVEL?}
    2314 -- CONTEXTUAL --> 2316{KEY TYPE?}
    2314 -- LOCAL INTERACTIVITY --> 2324{KEY TYPE?}
    2316 -- SELECT --> 2320[CHANGE CONTEXT]
    2320 --> 2322[PERFORM CONTEXT FUNCTIONS(S)]
    2322 --> B1((B))
    2316 -- RETURN --> 2318[REACQUIRE PREVIOUS CONTEXT]
    2318 --> B2((B))
    2324 -- DEC --> 2326{FIRST PID?}
    2324 -- INC --> 2332{LAST PID?}
    2324 -- FREEZE --> 2334[FREEZE FRAME STORE MEMORY]
    2334 --> B3((B))
    2326 -- YES --> 2328[TUNE PRIOR BROADCAST STREAM]
    2328 --> A1((A))
    2326 -- NO --> 2330[DEMUX AND DISPLAY PRIOR VIDEO PID]
    2330 --> B4((B))
    2332 -- YES --> 2338[TUNE NEXT BROADCAST STREAM]
    2338 --> A2((A))
    2332 -- NO --> 2336[DEMUX AND DISPLAY NEXT VIDEO PID]
    2336 --> B5((B))
    2332 -- D --> 2336

```

FIG. 23